

Application No.: 09/678579

Case No.: 48317US027

CI

33. A filtering face mask that comprises:

(a) a mask body that is adapted to fit over the nose and mouth of a wearer; and

(b) an exhalation valve that is attached to the mask body, the exhalation valve comprising:

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(1) a valve seat that comprises:

(i) a seal surface;

(ii) an orifice that is circumscribed by the seal surface; and

(iii) cross members that extend across the orifice to create a plurality of openings within the orifice; and

(2) a single flexible flap that has a fixed portion and only one free portion and first and second opposing ends, the first end of the single flexible flap being associated with the fixed portion of the flap so as to remain at rest during an exhalation, and the second end being associated with the free portion of the flexible flap so as to be lifted away from the seal surface during an exhalation, the second end also being located below the first end when the filtering face mask is worn on a person, the flexible flap being positioned on the valve seat such that the flap is pressed towards the seal surface in an abutting relationship therewith when a fluid is not passing through the orifice, the flexible flap being secured to the valve seat at the fixed portion of the flap at two securement points, the two securement points being disposed outside a region encompassed by the valve seat orifice.

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63. A filtering face mask that comprises:  
(a) a mask body that is adapted to fit over the nose and mouth of a wearer; and  
(b) an exhalation valve that is attached to the mask body, the exhalation valve comprising:

(1) a valve seat that comprises:

(i) a seal surface;

(ii) an orifice that is surrounded by the seal surface; and

(2) a single flexible flap that has a stationary portion and only one free portion and a peripheral edge that includes a stationary segment and a free segment, the stationary segment of the single flexible flap's peripheral edge being associated with the stationary portion of the flap so as to remain at rest during an exhalation, and the free segment of the peripheral edge being associated with the free portion of the flexible flap so as to be lifted away from the seal surface during an exhalation, the free portion also being located below the stationary portion when the filtering face mask is worn on a person, the flexible flap being positioned on the valve seat such that the flap is pressed towards the seal surface in an abutting relationship therewith when a fluid is not passing through the orifice, the flexible flap also being secured to the valve seat at the stationary portion of the flap at two securement points.